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52

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

DANG, KHANH

ART UNIT	PAPER NUMBER
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2111

DATE MAILED: 04/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/770,996

Applicant(s)

WARE, FREDERICK A.

Examiner

Khanh Dang

Art Unit

2111

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-39 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-39 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In the 2/18/2005 amendment, the newly introduced term "common bus line" to the amended claims is new matter, since the originally filed specification does not disclose a "common bus line." A bus, by definition, is a collection of wires or lines through which data is transmitted from one part of a computer to another. As a matter of fact, in Applicants' drawings, Figs. 4-7 show data transmitted over a common bus (703, for example) having two bus lines (704 and 705, for example). While it is true that bus 703 is a common bus, the bus lines (704 and 705, for example) are separate bus lines.

Claims 1-39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In the 2/18/2005 amendment, the newly introduced term "common bus line" to the amended claims is unclear and cannot be ascertained. A bus, by definition, is a collection of wires or lines through which data is transmitted from one part of a computer to another. As a matter of fact, in Applicants' drawings, Figs. 4-7 show data transmitted over a common bus (703, for example) having two bus lines (704 and 705, for example). While it is true that bus 703 is a common bus, the bus lines (704 and 705, for example) are separate bus lines.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-14, 17-39 are rejected under 35 U.S.C. 102(e) as being anticipated by Garleep et al.

As broadly drafted, these claims do not define any structure/step that differs from Garleep et al. With regard to claims 6, 9, Garleep et al. discloses a system providing simultaneous bidirectional signaling using a bus topology, the system comprising: a

Art Unit: 2111

first device (256, for example) operably coupled to a bus (a bi-directional bus comprising two bus lines 252, 254); a second device (262-1, for example) operably coupled to the bus, the first device (256) transmitting a first portion of a first set of data to the second device (262-1, for example) and the second device (262-1) transmitting a second portion of the first set of data to the first device (256) simultaneously during a first exchange slot; and a third device (262-2, for example) operably coupled to the bus, the first device (256) transmitting a first portion of a second set of data to the third device (262-2, for example) and the third device (262-2, for example) transmitting a second portion of the second set of data to the first device (256, for example) simultaneously during a second exchange slot. With regard to claim 7, see "time delay" in Garleep et al. With regard to claim 8, it is clear that in Garleep, the time delay is less than twice an end-to end propagation delay of the bus. With regard to claims 1-5, one using the device of Garleep et al. would have performed the same steps set forth in claims 1-5. With regard to claim 10, it is first noted that a statement of intended use such as "for providing simultaneous bi-directional signaling on a common bus" in a preamble of claim 10 has not been given patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. *Kropa v. Robie*, 88 USPQ 478 (CCPA 1951). In any event, Garleep et al. disclose device coupled to a bus in a bus topology capable of simultaneous bi-directional signaling, the device comprising: a driver (driver circuits, for example)

Art Unit: 2111

capable of additive signaling (continuous/consecutive writes, for example), said driver circuit applying transmit signals to the bus (a bi-directional bus comprising two bus lines 252, 254); a receiver circuit (also receiver circuits Rx in Garleep et al.) operably coupled to the driver, the receiver circuit capable of effectively subtracting the transmit signals to receive received signals from the bus, the driver and the receiver circuit operating during an exchange slot. With regard to claim 11, the net impedance is equal to one-half of the loaded impedance. Therefore, the signals that emerge from the memory device I/O pins split at the local bus signal line with one-half of the signal voltage traveling towards the write buffer and half towards the read buffer. The signal that travels towards the write buffer terminates at the matched impedance of the passive terminator. With regard to claim 12, a terminator (also termination in Garleep et al.) operably coupled to the driver and the receiver circuit, the terminator providing a controlled termination impedance. With regard to claim 13, the transmitter circuit (Tx)/transmit buffers are readable as "transmit circuit." With regard to claim 14, note a plurality of buffers in Garleep et al. With regard to claims 24-32, one using the memory system of Garleep et al. would have performed the same steps set forth in claims 24-32. With regard to claims 17-23, the system of Garleep et al., as explained above, is clearly a "memory system." With regard to claims 33-38, one using the system of Garleep et al. would have performed the same steps set forth in claims 33-38. See above explanation regarding claims 1-9. With regard to claim 39, see explanation regarding claims 1-9. It is also clear that scheduling is used for transmission between

Art Unit: 2111

the first and second device, and the first and third device. Newly introduced limitation to the claims will be fully addressed under "Response to Arguments."

Response to Arguments

Applicants' arguments filed 2/18/2005 have been fully considered but they are not persuasive.

At the outset, Applicants are reminded that claims subject to examination will be given their broadest reasonable interpretation consistent with the specification. *In re Morris*, 127 F.3d 1048, 1054-55 (Fed. Cir. 1997). In fact, the "examiner has the duty of police claim language by giving it the broadest reasonable interpretation." *Springs Window Fashions LP v. Novo Industries, L.P.*, 65 USPQ2d 1862, 1830, (Fed. Cir. 2003). Applicants are also reminded that claimed subject matter not the specification, is the measure of the invention. Disclosure contained in the specification cannot be read into the claims for the purpose of avoiding the prior art. *In re Sporck*, 55 CCPA 743, 386 F.2d, 155 USPQ 687 (1986).

With this in mind, the discussion will focus on how the terms and relationships thereof in the claims are met by the references. Response to any limitations that are not in the claims or any arguments that are irrelevant and/or do not relate to any specific claim language will not be warranted.

The Garleep 102 Rejection:

At the outset, it is noted that Applicants' argument is based on the newly introduced amendment to the rejected claims. In particular, Applicants argue that Garleep does not disclose memory devices and "common bus line."

Garleep et al. discloses a system providing simultaneous bidirectional signaling using a bus topology, the system comprising: a first device (256, for example) operably coupled to a bus (a bi-directional bus comprising two bus lines 252, 254); a second device (262-1, for example) operably coupled to the bus, the first device (256) transmitting a first portion of a first set of data to the second device (262-1, for example) and the second device (262-1) transmitting a second portion of the first set of data to the first device (256) simultaneously during a first exchange slot; and a third device (262-2, for example) operably coupled to the bus, the first device (256) transmitting a first portion of a second set of data to the third device (262-2, for example) and the third device (262-2, for example) transmitting a second portion of the second set of data to the first device (256, for example) simultaneously during a second exchange slot. It is clear that the devices in Garleep are addressable memory devices. With regard to the term "common bus line," see discussion regarding to the 112 rejection above. In any event, identical to what disclosed by the Applicants, the system of Garleep (including a bi-directional bus comprising two bus lines 252, 254, for example) transmit data over a common bus having a plurality of bus lines. See Applicants' drawings, Figs. 4-7. These Figures show data transmitted over a common bus having a plurality of bus lines.

Allowable Subject Matter

Claims 15 and 16 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 1st and 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to Khanh Dang at telephone number 571-272-3626.



Khanh Dang
Primary Examiner